

10/582345

664878seq.txt

SEQUENCE LISTING

AP20 Rec'd PCT/PTO 09 JUN 2006

<110> TAKARA BIO INC.

<120> A method for nucleic acid amplification

<130> 664878

<150> JP 2003-412326

<151> 2003-12-10

<160> 49

<170> PatentIn version 3.1

<210> 1

<211> 242

<212> DNA

<213> Artificial Sequence

<220>

<223> A portion of SARS coronavirus genomic RNA reverse transcribed to DNA. "nucleotide 1 to 5 is HindIII restriction site- nucleotide 238 to 242 is BamHI restriction site."

<400> 1

aagctttctc tatgatgggt ttcaaaatga attaccaagt caatgggtac cctaatatgt 60

ttatcacccg cgaagaagct attcgtcacg ttcgtgcgtg gattggcttt gatgtagagg 120

gctgtcatgc aactagagat gctgtgggta ctaacctacc tctccagcta ggattttcta 180

caggtgttaa cttagtagct gtaccgactg gttatgttga cactgaaaat aacacaggat 240

cc

242

<210> 2

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as 205RN3(18) for synthesizing cDNA from mRNA, and to amplify a portion of S ARS coronavirus genome. "nucleotides 16 to 18 are ribonucleotide s- other nucleotides are deoxyribonucleotides."

<400> 2

agttgcatga cagcccuc 18

<210> 3

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A12-205R for synthesizing cDNA from mRNA.

<400> 3

aaacatatta ggagttgcat gacagccctc 30

<210> 4

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as 215R for synthesizing cDNA from mRNA.

<400> 4

cagcatctct agttgcat 18

<210> 5

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A12-215R for synthesizing cDNA from mRNA, and to amplify a portion of SARS coronavirus genome.

<400> 5

aaacatatta ggcagcatct ctagttgcat 30

<210> 6

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A12-223R for synthesizing cDNA from mRNA, and to amplify a portion of SARS coronavirus genome.

<400> 6

aaacatatta ggagtaccca cagcatctct 30

<210> 7

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as 134FN3(18) to amplify a portion of SARS coronavirus genome. "nucleotides 16 to 18 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 7

atcacccgcg aagaagcu 18

<210> 8

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A12(-10)-215R for synthesizing cDNA from mRNA, and to amplify a portion of SARS coronavirus genome.

<400> 8

gggtaaccat tgcagcatct ctagttgcat

30

<210> 9

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A12(-20)-215R for synthesizing cDNA from mRNA, and to amplify a portion of SARS coronavirus genome.

<400> 9

tgacttggtatcagcatct ctagttgcat

30

<210> 10

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A12(6)-215R for synthesizing cDNA from mRNA, and to amplify a portion of SARS coronavirus genome.

<400> 10

ggtgataaac atcagcatct ctagttgcat

30

<210> 11

<211> 30
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A12(12)-215R for synthesizing cDNA from mRNA, and to amplify a portion of SARS coronavirus genome.

<400> 11
 ttcgcgggtg atcagcatct ctagttgcat

30

<210> 12
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as B134FN3(16) to amplify a portion of SARS coronavirus genome. "nucleotides 14 to 16 are ribonucleotides- other nucleotides are deoxyribonucleotides." "5'-end is labeled with biotin."

<400> 12
 atcacccgcg aagaag

16

<210> 13
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as 205RN3(16) to amplify a portion of SARS coronavirus genome. "nucleotides 14 to 16 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 13
 agttgcatga cagccc

16

<210> 14
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A6(-10)-215R for synthesizing cDNA from mRNA, and to amplify a portion of SARS coronavirus genome.

<400> 14
 gggtaacagc atctctagtt gcat

24

<210> 15
 <211> 27
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as A9(-10)-215R for synthesizing cDNA from mRNA, and to amplify a portion of SARS coronavirus genome.

<400> 15
 gggtaacacc agcatctcta gttgcat

27

<210> 16
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Designed oligonucleotide probe designated as SARS-BNI-B for detecting an amplified a portion of SARS coronavirus genome. "5'-end is labeled with FITC."

<400> 16

aagccaatcc acgcacgaac

20

<210> 17

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as 160FN3 to amplify a portion of SARS coronavirus genome. "nucleotides 16 to 18 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 17

cggtcgtgcg tggatugg

18

<210> 18

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as 241RN3 to amplify a portion of SARS coronavirus genome. "nucleotides 12 to 14 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 18

tagctggaga ggua

14

<210> 19

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as (A12)241RN3 to amplify a portion of SARS coronavirus genome. "nucleotide

s 18 to 21 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 19

tgacgaatag ctggagaggu a

21

<210> 20

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as 134FN3(16) to amplify a portion of SARS coronavirus genome. "nucleotides 14 to 16 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 20

atcacccgcg aagaag

16

<210> 21

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as ICAN-ALDH2-F to amplify a portion of human aldehyde dehydrogenase 2 gene. "nucleotides 18 to 20 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 21

agttgggcga gtacgggcug

20

<210> 22

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as ICAN-ALDH2-R to amplify a portion of human aldehyde dehydrogenase 2 gene.

"nucleotides 18 to 20 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 22

cagaccctca agccccaaca

20

<210> 23

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide probe designated as ALDH2 wG probe for detecting an amplified a portion of native human aldehyde dehydrogenase 2 gene.

"nucleotides 11 is ribonucleotide- other nucleotides are deoxyribonucleotides." "5'-end is labeled with ROX, and 3'-end is labeled with Eclipse."

<400> 23

ggcatacact gaag

14

<210> 24

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide probe designated as ALDH2 mA probe for detecting an amplified a portion of mutant human aldehyde dehydrogenase 2 gene.

"nucleotides 11 is ribonucleotide- other nucleotides are deoxyribonucleotides." "5'-end is labeled with FAM, and 3'-end is labeled with Eclipse."

<400> 24

ggcatacact aaag

14

<210> 25
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide primer designated as ALDH2-TH1 to amplify a portion of human aldehyde dehydrogenase 2 gene.

<400> 25
 cccggccact ccgcagaccc tcaagcccc 29

<210> 26
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide primer designated as ALDH2-TH2 to amplify a portion of human aldehyde dehydrogenase 2 gene.

<400> 26
 cccggccact ccagccacca gcagaccc 28

<210> 27
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide primer designated as ALDH2-TH3 to amplify a portion of human aldehyde dehydrogenase 2 gene.

<400> 27
 cccggccact ccaggctccg agccacca 28

<210> 28
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide PCR primer designated as ALDH2-F to amplify a portion of human aldehyde dehydrogenase 2 gene.

<400> 28
 caggggtcaac tgctatgatg t 21

<210> 29
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide PCR primer designated as ALDH2-R to amplify a portion of human aldehyde dehydrogenase 2 gene.

<400> 29
 agcccccaac agaccccaat c 21

<210> 30
 <211> 16
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide primer designated as ALDH2-TH4 to amplify a portion of human aldehyde dehydrogenase 2 gene.

<400> 30
 agccaccagc agaccc 16

<210> 31
 <211> 17

<212> DNA
<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as F2 to amplify a portion of Legionella pneumophila mip gene. "nucleotides 15 to 17 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 31
atggggcttg caatguc

17

<210> 32
<211> 17
<212> DNA
<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as R2 to amplify a portion of Legionella pneumophila mip gene. "nucleotides 15 to 17 are ribonucleotides- other nucleotides are deoxyribonucleotides."

<400> 32
agtagctaag gatgugg

17

<210> 33
<211> 12
<212> DNA
<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide probe designated as Mip4g12 probe for detecting an amplified a portion of Legionella pneumophila mip gene. "nucleotides 4 is ribonucleotide- other nucleotides are deoxyribonucleotides." "5'-end is labeled with FAM, and 3'-end is labeled with Eclipse."

<400> 33

aatggctgca ac

12

<210> 34

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as R2(-13) to amplify a portion of Legionella pneumophila mip gene.

<400> 34

ccaatgctat aagacaa

17

<210> 35

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as R2(-13)A12-1 to amplify a portion of Legionella pneumophila mip gene.

<400> 35

aacagctgca gtccaatgct ataagacaa

29

<210> 36

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide primer designated as R2(-13)A12-2 to amplify a portion of Legionella pneumophila mip gene.

<400> 36

caccaatttc atccaatgct ataagacaa

29

<210> 37
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide PCR primer designated as c-Ki-ras/12F to amplify a portion of human c-Ki-ras2 gene.

<400> 37
 gactgaatat aaacttgtgg 20

<210> 38
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide PCR primer designated as rasT1R to amplify a portion of human c-Ki-ras2 gene.

<400> 38
 aaactattgt tggatcatat tcg 23

<210> 39
 <211> 25
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide PCR primer designated as rasT14F to amplify a portion of human c-Ki-ras2 gene.

<400> 39
 gcgcggactg aatataaact tgtgg 25

<210> 40

<211> 29

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed oligonucleotide PCR primer designated as rasT4R to amplify a portion of human c-Ki-ras2 gene.

<400> 40

aaacgcgcgc tattgttgga tcatattcg

29

<210> 41

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as c-Ki-ras /12FN3 to amplify a portion of human c-Ki-ras2 gene. "nucleotides 18 to 20 are ribonucleotide- other nucleotides are deoxyribonucleotides."

<400> 41

gactgaatat aaacttgugg

20

<210> 42

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Designed chimeric oligonucleotide primer designated as c-Ki-ras /12RN3 to amplify a portion of human c-Ki-ras2 gene. "nucleotides 18 to 20 are ribonucleotide- other nucleotides are deoxyribonucleotides."

<400> 42

ctattgttgg atcatatucg

20

<210> 43
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide primer designated as PJDBF to amplify
 a portion of Neisseria gonorrhoeae cppB gene.

<400> 43
 ctttgcttca atgcctcgtt 20

<210> 44
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed oligonucleotide primer designated as PJDBR to amplify
 a portion of Neisseria gonorrhoeae cppB gene.

<400> 44
 catcacgcac cgaagcc 17

<210> 45
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed chimeric oligonucleotide primer designated as PJDB0FN3
 to amplify a portion of Neisseria gonorrhoeae cppB gene. "nucle
 otides 18 to 20 are ribonucleotide- other nucleotides are deoxyri
 bonucleotides."

<400> 45
 ctttgcttca atgcctcguu 20

<210> 46
 <211> 17
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Designed chimeric oligonucleotide primer designated as PJDB0RN3 to amplify a portion of Neisseria gonorrhoeae cppB gene. "nucleotides 15 to 17 are ribonucleotide- other nucleotides are deoxyribonucleotides."

<400> 46
 catcacgcac cgaagcc 17

<210> 47
 <211> 24
 <212> DNA
 <213> Artificial

<220>
 <223> Designed oligonucleotide primer designated as A6-215R to amplify a portion of SARS coronavirus genome.

<400> 47
 aaacatcagc atctctagtt gcat 24

<210> 48
 <211> 27
 <212> DNA
 <213> Artificial

<220>
 <223> Designed oligonucleotide primer designated as A9-215R to amplify a portion of SARS coronavirus genome.

<400> 48
 aaacatattc agcatctcta gttgcat 27

<210> 49
<211> 36
<212> DNA
<213> Artificial

<220>

<223> Designed oligonucleotide primer designated as A18-205R to amplify a portion of SARS coronavirus genome.

<400> 49

aaacatatta gggtaccag ttgcatgaca gccctc

36